The purposes of this research were to find the predictive variables of academic article writing ability of students, and to study the interaction effect between psychological trait and situational variable. The study sample was 160 1st and 2nd year students in the Institute of Physical Education in northern campuses during the 2009 academic year by cluster random sampling. The data was collected by academic article test, creative thinking test and questionnaires including students' writing skill that improved by teacher, reading experience, writing self-efficacy, good attitude towards academic article writing, and good attitude towards reading. Data was performed using SPSS for Windows, and analyzed by descriptive statistics, one-way analysis of variance, two-way analysis of variance and stepwise multiple regression analysis.

The results were as follows:

1. Psycho-social factors such as students’ writing skill that improved by teacher, writing self-efficacy, creative thinking, good attitude towards academic article writing, reading experience and good attitude towards reading were positively correlated with academic article writing abilities at the .01 level of significance.

2. Students’ writing skill that improved by teacher, writing self-efficacy, creative thinking and good attitude towards academic article writing could predict 74.6% of the variance in academic writing abilities at the .01 level of significance.

3. No interaction effect between psychological trait (creative thinking) and situational variable (reading experience).